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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EINSMANN, MARGARET V

ART UNIT	PAPER NUMBER
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1751

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DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/424,116

Applicant(s)

LANG ET AL.

Examiner

Margaret Einsmann

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 36-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 36-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the response filed 12/2/2002.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 26-36, 40-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Konrad.

Lang, U.S. Patent No. 4,025,301, teaches compositions for dyeing hair which contain at least one cationic dye of the formula exemplified which encompasses dyes of formula (I) as claimed, wherein the dye is present in the claimed amounts at the claimed pH's in mediums as claimed, see Abstract and col. 2, lines 2-13. The patentee teaches that the compositions may also contain oxidation dyes, and may be mixed with hydrogen peroxide before application to the hair as claimed, see col. 3, lines 42-51. Lang exemplifies various 3-aminopyridine dyes as claimed, see Examples such as 8-15, 20-24 and 27-29. In Example q, Lang exemplifies a composition which contains the dye of Example 14 (a dye of formula (I) as claimed), oxidation bases including p-toluenediamine, p-aminophenol and N-methyl-p-aminophenol sulfate, and couplers including m-aminophenol, all in the claimed amounts in a medium as claimed. The composition is mixed with a hydrogen peroxide oxidant, and is applied to hair in a dyeing method as claimed. Lang does not teach the claimed couplers of formula (I), or the claimed kits.

Konrad, U.S. Patent No. 4,588,410, teaches compositions for dyeing hair which contain a coupler of formula (I), which encompasses couplers of formula (II) as claimed, see Abstract. Konrad teaches that such couplers, particularly the claimed (2'-hydroxyethyloxy)-2-hydroxy-4-aminobenzene, is an improvement over the conventionally used m-aminophenol coupler because it results in more fashionable tones when combined with conventional developers such as p-aminophenols and p-diamines, see col. 2, line 24-col. 3, line 12.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to at least partially substitute the m-aminophenol coupler in the compositions and processes of Lang (which use oxidation bases and direct dyes of formula (I) as claimed), resulting in dyeing compositions and processes as claimed, because Lang does not require any specific oxidation dyes for use in the patentee's compositions, and Konrad teaches that the claimed substituted m-aminophenols have various improvements over the conventionally used m-aminophenol such as improved tones when combined with conventional oxidation bases, including the bases exemplified by Lang. The storage of the compositions of Lang as modified by Konrad in kits as claimed would have been obvious to those skilled in the art because such kits are conventional for the storage of two-part oxidative hair dyeing compositions, absent a showing otherwise.

Examiner notes the comparative Examples in the specification which show that two compositions as claimed have increased color uptake as compared two compositions which differ only in that they contain m-aminophenol as coupler instead of 5-amino-2-methylphenol as claimed. This evidence is not deemed persuasive to overcome the above rejection for several reasons.

First, the closest prior art of record, Lang's Example q, was not compared. Lang's composition contains a mixture of oxidation bases and couplers, encompassed by the claims but not present in the compared compositions. It is unclear how these additional dyes effect the overall results. Showings of unexpected results must

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compare the closest prior art. See *Ex parte Beck*, 9 USPQ 2d 2000 (BPAI 1987); *In re Burkel*, 201 USPQ 67 (CCPA 1979), and *In re Merchant*, 197 USPQ 785 (CCPA 1976).

Second, the evidence is not commensurate in scope with the claims.

Particularly, the claims allow for countless mixtures of dyes of formula (I) in combination with any oxidation base and a coupler of formula (II), wherein each component may be present in virtually any amount at any pH. Two combinations as claimed were compared, wherein both combinations contained the same oxidation base and coupler, i.e. p-phenylenediamine and 2-methyl-5-aminophenol. Such a limited showing is not representative of the full scope of the claimed invention. Evidence of unobviousness must be commensurate in scope with the claims. See *In re Kulling*, 14 USPQ 2d 1056, 1058 (Fed. Cir. 1990).

Response to Arguments

Applicant's arguments filed have been fully considered but they are not persuasive regarding the above rejection.

Applicant argues that there is no motivation to combine the references.

Adequate motivation to combine the references is supplied by Konrad, column 2 (see above) who teaches the substituted m-aminophenol as an improvement over m-aminophenol. The purpose of Konrad's invention to an improved coupler, that is an improved m-aminophenol, making the substitution prima facie obvious.

Applicant argues that there is no objective teaching to combine Konrad's substituted m-aminophenol with the direct dye of Lang in example q. However,

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Applicant is not adding a component but is replacing the m-aminophenol in example q with the m-aminophenol which has been invented by Konrad as an improvement over m-aminophenol. Applicant argues that Konrad does not teach nor suggest the substitution of the coupler of formula I for m-aminophenol for use in compositions comprising both an oxidation base and a direct dye. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Konrad need not show or teach or suggest the substitution of the coupler of formula 1 for m-aminophenol because Lang is applied for the teaching that meta-aminophenol and applicant's direct dyes are used in combination. Thus all of the dyes are used in compositions for dyeing hair. It is prima facie obvious to combine two compositions each taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose. See *In re Kerkhoven*, 205 USPQ 1069, 1072. Applicant next argues that there is no teaching to use Konrad's coupler in a composition comprising all 14 components in example q of Lang. Applicant is directed to his own specification, pages 27 and 28 which reveals that most of the components are part of the "common dye support" used with any combination of dyes. They are not reactive components.

Regarding the arguments that Kerkhoven is not applicable, applicant states that the components of the composition polymerize and therefore are reactive components, not static components. The direct dye is not a reactive component, and does not take part

in the oxidative polymerization. Accordingly that argument is not applicable. The direct cationic dyes are known additives to oxidation dyeing compositions to provide added glints and shades. They do not react with the bases and couplers. The term "direct dye" means that the dye is already formed and colors the substrate without the need for further reaction. Applicant states, "Given that Lang example q is a complex chemical mixture..." The dye chemist knows that most of the 19 components in the mixture are static components which are commonly used in dyeing compositions; the only reactive components are the oxidation bases and couplers, and they are known to color hair when used in combination with an oxidant. That is predictable. The direct dye will also color the hair directly, not by participating in the polymerization reaction of the oxidation bases and couplers in the presence of an oxidant.

Applicant states that **the office** lacks knowledge of any interaction between oxidation bases and direct dyes. If applicant has evidence of any reaction between the direct dyes and the oxidation bases, needs to present evidence thereof in order to discredit the statements of this office. A mere allegation is not evidence. Applicant then quotes from an office action that states that Rondeau teaches the equivalence of the double base with other oxidation bases when used in combination with cationic direct dyes." This office does not understand how this statement infers reaction between the cationic dyes and the oxidation bases. The double bases are oxidation bases used in combination with cationic direct dyes. Applicant appears to be confusing reacting with mixing. There is no suggestion in said office action that any oxidation base reacts with

cationic direct dyes. This office agrees that there is an issues of compatibility of cationic dyes with oxidation dyes, which are merely mixed, not reacted with each other.

Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang and Konrad as applied to claim 26 above, and further in view of Rondeau et al., US 6,001,135.

Lang and Konrad are applied as in the above rejection as rendering obvious the composition as claimed in claim 26 wherein a cationic direct dye is combined with an oxidation base and a substituted m-aminophenol coupler. However, there is no mention in either reference of using a double base as claimed in claim 37 as the oxidation base.

Rondeau is applied for teaching the equivalence of the double bases as claimed in claim 37 to the oxidation bases used in Lang when used in compositions containing cationic direct dyes. See the disclosure of Rondeau beginning on col 7 line 65 and continuing through column 9 for the oxidation bases and columns 11 et seq for the direct dyes. Note in particular dye 130 in col 14 which is an isomer of the pyridoneazo dye as taught by Konrad. Accordingly it would have been obvious to one skilled in the art to use a double base as the oxidation base in the composition of Lang because Rondeau teaches their equivalence for use as oxidation bases in oxidative hair dyeing compositions comprising a cationic direct dye.

Response to Arguments

Applicant argues that since the equivalence involves reactive components, there is no teaching of equivalence. The examiner respectfully disagrees. There is a clear

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teaching of equivalence, that is, a teaching that one oxidation base can be substituted for another at the place cited above.

Claims 26-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rondeau et al., US 5,919,273. Rondeau teaches and claims compositions, processes and kits for dyeing keratin fibers, in particular, hair, comprising an oxidation base, a substituted meta-aminophenol and a cationic direct dye. The oxidation base includes all claimed herein (see claims 9-11), the substituted meta-aminophenol includes those claimed herein (see claims 7 and 18), and the cationic dyes include a pyridineazo, dye II-30, which is a position isomer of the dyes claimed in this application (see column 29, claim 19). Note also Structure A₄ in col 3 which is a general teaching of the pyridine component. The process of dyeing keratin fibers is claimed in claim 39 and the kit analogous to the one claimed in instant claim 60 is claimed in claim 43.

It would have been obvious to the man having skill in the art at the time the invention was made to formulate a composition for dyeing keratin hair containing the direct dyes as claimed with the substituted aminophenol coupler as claimed and oxidation base as claimed because Rondeau et al. teaches compositions, processes and kits which includes a position isomer of applicant's claimed dye. Note that structurally similar compounds are generally expected to have similar properties. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552. Closely related homologs, analogs and isomers in chemistry may create a prima facie case of obviousness. *In re Dillon* USPQ 2d 1897, 1904 (Fed. Cir. 1990); *In re Payne* 203 USPQ 245 (CCPA 1979); *In re Mills*

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126 USPQ 513 (CCPA 1960); *In re Henze* 85 USPQ 261 (CCPA 1950); *In re Hass* 60 USPQ 544 (CCPA 1944).

Response to Arguments

Applicant claims that the properties of isomeric related species are not necessarily similar or predictable and cites Lang '301 which teaches that pyridine isomers have different properties. He states that the 3-pyridine isomers produce a range in the yellows that is more extensive than the known 2-pyridine isomers. In that statement he implicitly discloses that the 2-pyridine isomers are also used as direct hair dyes, that is, they serve the same function, but produce a less extensive range of yellow coloration. Accordingly Lang teaches that the isomers serve an equivalent function, but the range of coloration is not as large. When a hair colorist is looking for a particular shade, she does not need the entire range of shades. She would be equally likely to consider a shade formed by the 2-isomer as by the 3-isomer. Accordingly, while the examiner agrees that the range of shades produced by one isomer is not the same as the range produced by the other, Lang teaches that they both are direct hair dyes, thereby serving an equivalent function. What is predictable is that one can be used in place of the other when a direct dye is required, and that they will produce different shades of color on the hair, which is to be expected when substituting one dye for another. IN citing the Lang reference, applicant is providing further motivation to substitute closely related position isomers to serve the same function, as it is clear that

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Lang discovered that a close position isomer could function in the same manner as a known direct dye.

Claims 26-60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-43 of U.S. Patent No. 5,919,273. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are directed to compositions, process and kits containing all of the elements of the compositions, process and kits as claimed herein except that the claimed dye includes a position isomer of the dyes in the compositions, processes and kits claimed in the patent. See analysis in the above rejection under 35 USC 103(a)

No response is necessary to the arguments regarding this rejection as they parallel the arguments presented regarding the obviousness rejection over Rondeau.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is (703) 308-3826. The examiner can normally be reached on Monday to Thursday and alternate Fridays from 7:00 A.M. to 4:30 P.M. The fax phone number for this Technology Center is (703) 305-3599

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



MARGARET EINSMANN

PRIMARY EXAMINER 1751

July 25, 2002